

BAW
Central Regional Office
Compliance Evaluation Inspection Report

Facility Name: CPF, Inc.

Inspection Date: August 17, 2020

Report Date: August 27, 2020

Inspector: Stephen Klosz

FMF#: 186901

Inspection Type: Remote Multimedia

FACILITY INFORMATION

Facility Representatives: Peter Ness, Site HSE Leader; Domingo Rivera, Plant Manager; Jim Drapeau, Wastewater Operator

Number of Employees: 35

Hours of Operation: Monday – Friday, two shifts (6am-3:30pm, 3:30pm-1:30am)

PERMIT HISTORY and Status Information:

AQ:	Air Classification: SM80-R
	Source Registration: 1210907
HW:	Hazardous Waste Status: SQG RCRA/SQG MA
	HW ID #: MAD980194518
IWW:	Industrial Wastewater Classification: SWT2
SW:	Solid Waste Facility Classification: not applicable (“n/a”)
UST:	UST ID#: 10076
TURA:	LQTU: 1 chemical: Sodium Hydroxide

ENFORCEMENT HISTORY:

Date of Last Inspection: April 16, 2014

Inspector: Giles Steele-Perkins

Enforcement Action: ACOP

Date of RTC: January 12, 2015

COMPLIANCE ASSESSMENT:

Air Quality	Yes_x_ No__
Hazardous Waste (RCRA)	Yes_x_ No__
Industrial Wastewater	Yes_x_ No__
TURA	Yes__ No_x_
Solid Waste	Yes__ No_x_
Underground Storage Tanks	Yes__ No_x_
Referral needed other program	Yes__ No_x_

A. VIOLATION SUMMARY**Air Pollution Control:**

1. Failure to maintain records associated with a limited plan approval as well as failure to maintain records associated with restricted emission status.

Hazardous Waste

2. Failure to perform weekly inspection of hazardous waste accumulation areas.
3. Failure to delineate hazardous waste accumulation area.
4. Failure to label waste oil drum properly.
5. Failure to mark hazardous waste accumulation area with proper signage.
6. Failure to keep containers of universal waste closed during storage.
7. Failure to notify the Department of a change in ownership.

Industrial Wastewater

8. Monthly DMR permit limits exceeded.

GENERAL FACILITY DESCRIPTION

The Company manufactures tea and water beverages in bottles. The processes involve mixing and blending of raw materials with water to produce different beverages. CPF, Inc. of Ayer, MA purchased Patriot Beverages, LLC in 2018, which was formerly owned by Sunny Delight Beverages Company of Cincinnati, OH since 2007 after being sold by Kraft Foods Global, Inc. The Company is located at 20 Harvard Road, Littleton, Massachusetts, next to wetlands bordering Reedy Meadow Brook. The inspection was conducted to review the Company's compliance with the Massachusetts Hazardous Waste, Air Quality, Industrial Wastewater, Underground Storage Tank and Toxics Use Reduction regulations.

Due to the COVID-19 pandemic, an on-site multimedia inspection was not conducted but instead a review of all files related to the facility concerning the compliance areas listed above was. The inspection began on August 17, 2020 by contacting CPF, Inc. via telephone. Peter Ness of CPF, Inc. who is the EHS Site Leader in charge of compliance returned the phone call to discuss further steps and how the inspection would be performed remotely. Emails, phone calls, and photos were exchanged concerning specific questions of compliance for the facility in order to satisfy this inspection. Details from the previous inspection report performed by Giles Steele-Perkins in 2014 were also used in this report.

C. PROCESS UNIT/SUPPORT/WASTE MANAGEMENT/FACILITY MANAGEMENT OPERATION SUMMARY

UO#1 – Bottling

SO#1 – Tank Farm

SO#2 – Water Filtration

SO#3 – Underground Storage Tanks

SO#4 – Maintenance Areas

WMO#1 – Hazardous Waste and Waste Oil

WMO#2 – Universal Waste

WMO#3 – Industrial Wastewater Treatment (NPDES) and Storm Water

FBE#1 - Boilers

FMO – Toxics Use Reduction

UO# 1: - Bottling

The Company currently operates bottling lines in one building. The three products manufactured at the site include Propel Water, LifeWTR, and Teahouse brand teas. Recipes for these products are provided by Pepsi Co. These lines are located in the main plant. Beverages are mixed in a tank according to recipes from juice flavorings, water, potassium sorbate, organic black tea, tea leaves, hibiscus tea and hibiscus flour. The ingredients are mixed in one batch room for the bottling lines. The concentrates and flavorings are manually added from barrels and smaller containers. Purified reverse osmosis (RO) water is used for all the teas and water beverages. These waters are stored in large above ground tanks.

Prior to filling, the empty containers are sanitized with hot water. After filling, the containers are conveyed up and down a track through spray cooling and disinfection tunnels.

Each process line has a heat exchanger and roof cooling tower system and a clean in place equipment sanitizing system. Water used in the cleaning process is discharged to the wastewater treatment plant. Sodium hydroxide is also used to clean tanks, equipment, and piping after production runs in order to maintain product compliance with the FDA. Cleaning is performed after each production run in order to ensure flavorings are not carried over to the next recipe. The bottling lines have clean in place systems that are set automatically to control the amount of sodium hydroxide and water being used (half NaOH, half water). The waste sodium hydroxide is sent to the wastewater treatment plant via floor drains so that no hazardous waste is collected during this process.

After bottling, the containers are palletized, shrink-wrapped and stored in the large warehouse of the main plant. They are also warehoused in the old building across the street.

Waste Streams

Air Quality – volatile organic compounds in the form of alcohols contained in the flavorings and from the container printing ink. The Company claims they no longer generate VOCs in the forms of alcohols from flavorings and no longer performs container label printing. There is a Limited Plan Approval (LPA) for these operations and employee personnel were unaware of the obligations and expectations of the plan approval. The limited plan approval (Transmittal No. W054305, issued December 13, 2004) limits the long-term alcohol and printing ink VOC emissions to fewer than 5 tons year. It was recommended to the Company that if the permit concerning VOCs from alcohol flavorings and

inks from container label printing are no longer an accurate representation of their operations, a letter be written to the Section Chief of Air Quality Permitting requesting the permit to be deactivated.

Hazardous Waste – The Company claims to no longer generate HW as part of their bottling operations as juice flavorings containing alcohols are no longer used. Some waste oil is generated from servicing bottling lines. Sodium Hydroxide used for cleaning is sent to the wastewater treatment plant.

Industrial Wastewater – Process wastewaters from the cooling tunnels, vessel and line clean-in-place rinses, floor wash-downs, waste beverage batches and cooling tower blow-down are discharged to the on-site wastewater treatment plant.

SO# 1: - Tank Farm

Fourteen above-ground, steel tanks ranging in size from 12,000 to 50,000 gallons in size store all the liquid ingredients (RO water and filtered town water,) and wastewaters (batch rinse waters, contact cooling water, RO waters, and offsite wastewater) at the facility. They are located behind the administration and wastewater treatment plant buildings. All the tanks are tied to the treatment plant, as are the storm water catch basins near them. The storm water basins in the yard go to the storm water lagoon.

Waste Streams

Air Quality– minor VOC's from tank breathing losses.

Hazardous Waste – None.

Industrial Wastewater – The wastewater contents of the tanks.

SO# 2: - Water Filtration

Town water is first treated with chlorine to destroy microbes and is then filtered with charcoal to remove the chlorine and solids. The chlorinated and filtered waters are stored at the tank farm. The filtered water is to make purified water in an RO system. Final RO water, RO reject water and RO backwash are also stored in tanks in the farm. The Company may use a hundred thousand to millions of gallons of town water per day, depending on production. The RO backwash is sent to the treatment plant.

SO# 3: - Underground Storage Tanks

Two 10,000-gallon, underground storage tanks that were previously used to store number 6 fuel oil remain empty. They are maintained outside the boiler plant in the event the Company

needs back up fuel to natural gas. If these tanks were to be filled in the case that natural gas became too expensive, they would be filled with number 2 fuel oil. The tanks are constructed of double wall steel with a fiberglass reinforced plastic cover. Some lines are steel while others are FRP. Monthly inspections were not being performed on the tanks prior to being contacted for the inspection and no one at the site was trained as a Class C operator of the tank system. The Company was swift to correct these issues and has contracted Watermark Environmental, Inc. to perform monthly inspections and train two class C operators for the site.

The tank fuel level is monitored inside the plant on two Preferred Instruments – Rimcor Electronic Tank Gauges. Tank leak detection is monitored on an Emco Electronics EECO 1500 system gauge located inside an office. The Company has not burned #6 fuel for years so there have been no deliveries. The two tanks and lines passed a tightness test in December 2013.

SO# 4: - Maintenance Areas

The Company has a general maintenance area in the main plant where minor equipment work is conducted. Welding is conducted in another area. Light truck maintenance is conducted by a separate company that moves product to local warehouses. The Company no longer has three solvent parts washers that use high flash mineral spirits offered by Heritage Crystal Clean. The maintenance area has been rearranged to also support a dry lab used for quality control.

WMO# 1: - Hazardous Waste and Waste Oil

The Company accumulates waste oil in a storage locker at the wastewater treatment plant as their main accumulation area. Waste oil is generated by maintenance staff from servicing the bottling lines. There is a satellite area designated for the generation of waste oil and a new satellite area was created for water that is pumped out from spill buckets for the tank system. The main accumulation areas are not delineated and no sign to indicate the storage of waste oil was observed in the photos provided. The accumulation areas were not being inspected weekly as stated by the Company via email. Only one hazardous waste manifest was available for 2019 and the Company claimed this was their only hazardous waste shipment for the year. The main reason for the sole shipment in 2019 was to remove old and expired chemicals that was left over from Patriot Beverages after CPF, Inc. purchased the business.

WMO# 2: - Universal Waste

Universal wastes consisting of lamps and batteries, as well as light ballasts and other items, are stored in a locked trailer behind the main plant. Approximately ten open boxes of lamps were photographed inside the trailer with some of the boxes appearing to be full. The Company will need to ensure timely shipments of universal waste are occurring, boxes being filled remain closed and secure, and the boxes are properly labeled with start dates from when the boxes began being filled.

WMO# 3: - Industrial Wastewater Treatment (NPDES) and Storm Water

Discharges from the wastewater treatment plant are covered by the Company's NPDES permit, No. MA0004936. The Company was meeting all the sampling, planning and reporting requirements of the permit, such as monthly DMR's, quarterly toxicity testing, storm water planning and inspecting, seasonal bacterial sampling, and annual priority pollutant sampling.

The Company has conducted a successful study on adding sodium bisulfate to remove chlorine. This study has achieved positive results in the sense that chlorine has not been detected on monthly DMR's for the first two quarters of 2020. They are looking at ways to remove the aluminum.

The approved NPDES permit allows wastewaters to be accepted from Epic Enterprises, CPF Inc., and Tate & Lyle while monthly quantities accepted by the wastewater treatment plant are tracked on the DMR's. The maximum allowable flow for a daily limit is 750,000 gallons. Annual priority pollutant testing must take place between the months of April and June. Any additional accepted wastewaters must be approved by EPA & MassDEP. Some chemicals that are allowed to be discharged to Reedy Meadow Brook have specific limits dictated by the permit. These chemicals are residual chlorine, recoverable aluminum, phosphorus, ammonia nitrogen, oil and grease, cadmium, copper, lead, nickel, zinc. Other restrictions that are specified in the permit include: flow, dissolved oxygen, total suspended solids, biochemical oxygen demand, temperature, etc. Monthly DMR's for the first half of the year 2020 were reviewed for this inspection and some exceedances were noticed. There were pH exceedances observed from the months of February to July, excluding March, where pH was reported between 8.4 and 8.5 where the permit limit has a maximum of 8.3. There was also a temperature exceedance for the month of July at 84 degrees F where the permit limit is 83 degrees F. Toxicity reports for January, April, and July of 2020 were reviewed and these tests passed all permit limits. Priority pollutant testing was completed in May 2020 and resulted in arsenic being detected at 0.005 mg/l and Nickel at 0.004 mg/l.

Another requirement of the NPDES permit is the development and availability of a Stormwater Pollution Prevention Plan (SWPPP). Items that must be included in the SWPPP are specified in the NPDES permit. A copy of the SWPPP was reviewed by the inspector and found to be sufficient.

James Drapeau and Michael Zaborowski are the wastewater treatment plant operators for the site, one for each shift. James and Michael are current with their registrations as Class 6-C operators, expiring December 31, 2021. A company called Whitewater is contracted in case the wastewater treatment operators are to take vacations or time off.

Treatment Plant

Wastewater from the production lines enters the covered equalization tank and flows into the anaerobic digester. It then flows into one of two parallel, uncovered batch reactors for aeration. During the last inspection it was noticed that one reactor was aerating, producing a

brown-colored water while the other was settling and decanting, producing a green-colored water. The water is decanted to the covered clarifier. From there it drains to the sand filters on the ground level of the plant. Polymers are added to the clarifier and reactors. Sludges are removed from each of these tanks to separate holding tanks. The sludges are then pumped to a filter press. The filtrate is returned to the treatment process. The pressed sludge is land applied at a site in Westminster. The sand-filter effluent discharges into a final aeration basin, through a UV light disinfecting unit and through the Parshall flume to Reedy Meadow Brook.

All recordings are logged in a system in the upstairs lab and office of the plant. The plant is fitted with over 30 alarms that alert the operators through a sequence of telephone numbers. The flow, pH and DO meters (did not observe) are calibrated annually by an outside firm.

Sanitary wastewater from the facility is discharged to an onsite Title 5 septic system.

Storm Water

The Company has also obtained approval to discharge stormwater from their retention pond to Reedy Meadow Brook since it combines to the wetland outfall. The retention pond holds water from building roofs and parking lot drains. There are oil/water separators for each stormwater catch basin leading to the retention basin and a separator in the discharge line to the basin itself. In the event of a spill during the offloading of high strength BOD waste from the offsite suppliers, the Company is able to shut the gate valve between the lagoon and discharge point. Catch basins at the outdoor area near the storage tanks drain to the wastewater treatment plant. The retention pond is also regulated under the NPDES permit for flow, total suspended solids, oil and grease, pH, and total phosphorus. The pH, phosphorus, and flow must be reported whereas total suspended solids and oil and grease have specific daily limits of 100mg/l for total suspended solids and 15mg/l for oil and grease. An exceedance was observed for January 2020 in the amount of 139.6 mg/l for total suspended solids. Another exceedance was observed for June 2020 for total suspended solids at 131.8mg/l.

Air Emissions

Methane emissions from the treatment plant are combusted in a flare. The flare is operated under an LPA issued in 1992.

The Company no longer operates a water scrubber system that was used to reduce odors from the wastewater from the fruit processing operation. The solids removal system for this wastewater is also no longer used.

FBE# 1: - Boilers

The Company operates five (5) natural gas fired boilers. Four of the boilers are Cleaver Brooks models and three of these boilers have the ability to run on oil as well. The last natural gas fired boiler does not have the ability to run on oil and is rated at 0.69mmBTU. Two of the Cleaver Brooks boilers that possess the ability to switch between natural gas and fuel oil have a rating of 33.5mmBTU and the other Cleaver Brooks model is rated at 29.2BTU.

Waste Streams

Air Quality- These boilers are covered under an RES approval for the facility (TR# W205713) that was issued on May 8, 2008, which requires monthly and annual emission records to be tracked and recorded. The Company had mentioned via email that since VeryFine Products had switched from #6 fuel oil to natural gas for the boiler operation, they were no longer tracking the emissions required by the RES approval; therefore, there were no monthly or annual emissions records to review.

FMP – Toxics Use Reduction

One toxic was reported as otherwise-used above the 10,000-pound reporting threshold: sodium hydroxide. The 2012 TURA plan included both the NaOH and aluminum sulfate. An updated 2019 TURA plan was reviewed during this inspection. The Company reported for NaOH once again since it is used to clean and sanitize their equipment, tanks, and piping after production runs. Sodium Hydroxide is also used in the wastewater treatment plant for neutralization. The amount of sodium hydroxide otherwise used totaled 8,322 lbs. with an additional 122,572 lbs being categorized as otherwise used for the wastewater treatment plant. Employees of the Company were notified of TURA contribution opportunities via memo that was included in their paychecks in December 2019. No violations related to TURA were found on the updated plan.